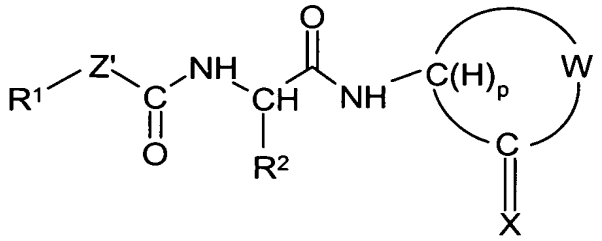
CLAIM SUMMARY DOCUMENT

Kindly cancel Claims 99-112 and 121-130 without prejudice or disclaimer.

99-117. Canceled.

E1

118. (Currently Amended) A method for inhibiting β-amyloid peptide synthesis and/or release in a mammalian subject thereby inhibiting onset of diseases mediated by β-amyloid peptide which method comprises administering to said mammalian subject a pharmaceutical composition comprising a pharmaceutically inert carrier and an effective amount of a compound or a mixture of compounds of formula IA:



IA

wherein R^1 is selected from the group consisting of:

A) alkyl of from 1 to 10 carbon atoms;

B) alkenyl of from 2 to 10 carbon atoms and 1-2 sites of alkenyl unsaturation;

C) alkynyl of from 2 to 10 carbon atoms and from 1-2 sites of alkynyl unsaturation;

D) cycloalkyl of from 3 to 12 carbon atoms;

E) cycloalkenyl of from 4 to 8 carbon atoms;

F) substituted alkyl of from 1 to 10 carbon atoms, having from 1 to 5 substituents selected from:

1) alkoxy of from 1 to 10 carbon atoms;

2) substituted alkoxy of the formula substituted alkyl-O- where substituted alkyl is as defined in F herein;

3) cycloalkyl which is as defined in D herein;

4) substituted cycloalkyl is defined in I herein;

E'

5) cycloalkenyl which is defined in E herein;

6) substituted cycloalkenyl which is defined in J herein;

7) acyl selected from alkyl-C(O)-, substituted alkyl-C(O)-, cycloalkyl-C(O)-, substituted cycloalkyl-C(O)-, aryl-C(O)-, heteroaryl-C(O)- and heterocyclic-C(O)- wherein alkyl is defined in A herein; wherein substituted alkyl is defined in F herein; wherein cycloalkyl is defined in D herein; wherein substituted cycloalkyl is defined in I herein; wherein aryl is defined in F21 herein; wherein heteroaryl is defined in F22 herein; and wherein heterocyclic is defined in F23 herein;

8) acylamino having the formula -C(O)NRR where each R is independently hydrogen, alkyl, substituted alkyl, aryl, heteroaryl, or heterocyclic wherein alkyl is defined in A herein; wherein substituted alkyl is defined in F herein; wherein aryl is defined in F21 herein; wherein heteroaryl is defined in F22 herein; and wherein heterocyclic is defined in F23 herein;

9) acyloxy selected from alkyl-C(O)O-, substituted alkyl-C(O)O-, cycloalkyl-C(O)O-, aryl-C(O)O-, heteroaryl-C(O)O-, and heterocyclic-C(O)O- wherein alkyl is defined in A herein; wherein substituted alkyl is defined in F herein; wherein cycloalkyl is defined in D herein; wherein aryl is defined in F21 herein; wherein heteroaryl is defined in F22 herein; and wherein heterocyclic is defined in F23 herein;

10) amino;

11) aminoacyl having the formula -NRC(O)R wherein each R is independently selected from the group consisting of hydrogen, alkyl, substituted alkyl, aryl, heteroaryl, and heterocyclic; wherein alkyl is defined in A herein; wherein substituted alkyl is defined in F herein; wherein aryl is defined in F21 herein; wherein heteroaryl is defined in F22 herein; and wherein heterocyclic is defined in F23 herein;

12) aminoacyloxy having the formula -NRC(O)OR wherein each R is independently selected from the group consisting of hydrogen, alkyl, substituted alkyl, aryl, heteroaryl, and heterocyclic; wherein alkyl is defined in A herein; wherein substituted alkyl is defined in F herein; wherein aryl is defined in F21 herein; wherein heteroaryl is defined in F22 herein; and wherein heterocyclic is defined in F23 herein;

13) cyano;

14) halogen;

15) hydroxyl;

16) carboxyl;

17) carboxylalkyl having the formula "-C(O)Oalkyl" wherein alkyl is defined in A herein;

18) thiol;

19) thioalkoxy having the formula -S-alkyl, wherein alkyl is defined in A herein;

20) substituted thioalkoxy having the formula -S-substituted alkyl, wherein substituted alkyl is defined in F herein;

21) aryl having from 6 to 14 ring carbon atoms, optionally substituted with from 1 to 5 substituents selected from the group consisting of:

a) hydroxy;

b) acyl as defined in F7 herein;

c) acyloxy as defined in F9 herein;

d) alkyl as defined in A herein;

e) substituted alkyl as defined in F herein;

f) alkoxy as defined in F1 herein;

g) substituted alkoxy as defined in F2 herein;

h) alkenyl as defined in B herein;

i) substituted alkenyl as defined in G herein;

j) alkynyl as defined in C herein;

E'

k) substituted alkynyl as defined in H herein;

l) amino;

m) aminoacyl as defined in F11 herein;

n) acylamino as defined in F8 herein;

o) alkaryl of the formula -alkylene-aryl having 8 carbon atoms in the alkylene moiety and aryl is defined in F21 herein;

p) aryl as defined in F21 herein;

q) aryloxy having the formula -O-aryl wherein aryl is defined in F21 herein;

r) azido;

s) carboxyl;

t) carboxylalkyl having the formula "-C(O)Oalkyl" wherein alkyl is defined in A herein;

u) cyano;

v) halo selected from fluoro, chloro, bromo and iodo;

w) nitro;

x) heteroaryl as defined in F22 herein;

y) heterocyclic as defined in F23 herein;

z) aminoacyloxy as defined in F12 herein;

aa) oxyacylamino having the formula -OC(O)NRR where each R is independently hydrogen, alkyl, substituted alkyl, aryl, heteroaryl, or heterocyclic wherein alkyl is defined in A herein; wherein substituted alkyl is defined in F herein; wherein aryl is defined in F21 herein; wherein heteroaryl is defined in F22 herein; and wherein heterocyclic is defined in F23 herein;

bb) thioalkoxy having the formula -S-alkyl, wherein alkyl is defined in A herein;

cc) substituted thioalkoxy having the formula -S-substituted alkyl, wherein substituted alkyl is defined in F herein;

dd) thioaryloxy having the formula -S-aryl wherein aryl is defined in F21 herein;

ee) thioheteroaryloxy having the formula -S-heteroaryl wherein heteroaryl is defined F22 herein;

ff) -SO-alkyl wherein alkyl is defined in A herein;

gg) -SO-substituted alkyl wherein substituted alkyl is defined in F herein;

hh) -SO-aryl wherein aryl is defined in F21 herein;

ii) -SO-heteroaryl wherein heteroaryl is defined in F22 herein;

jj) $-SO_2$-alkyl wherein alkyl is defined in A herein;

kk) $-SO_2$-substituted alkyl wherein substituted alkyl is defined in F herein;

ll) $-SO_2$-aryl wherein aryl is defined in F21 herein;

mm) $-SO_2$-heteroaryl wherein heteroaryl is defined in F22 herein;

nn) trihalomethyl wherein halo is defined in I20 herein;

oo) mono- and dialkylamino wherein alkyl is defined in A herein;

pp) mono- and di-substituted alkylamino wherein substituted alkyl is defined in F herein;

qq) mono- and di-arylamino wherein aryl is defined in F21 herein;

rr) mono- and di-heteroarylamino wherein heteroaryl is defined in F22 herein;

ss) mono- and di-heterocyclicamino wherein heterocyclic is defined in F23 herein;

tt) unsymmetric di-substituted amino having different substituents selected from alkyl, substituted alkyl, aryl, heteroaryl and heterocyclic wherein alkyl is defined in A herein; wherein substituted alkyl is defined in F herein; wherein aryl is

defined in F21 herein; wherein heteroaryl is defined in F22 herein; and wherein heterocyclic is defined in F23 herein;

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22) heteroaryl of from 1 to 15 ring carbon atoms and 1 to 4 ring heteroatoms selected from oxygen, nitrogen and sulfur, optionally substituted with from 1 to 5 substituents selected from:

a) alkyl as defined in A herein;

b) substituted alkyl as defined in F herein;

c) alkoxy as defined in F1 herein;

d) substituted alkoxy as defined in F2 herein;

e) aryl as defined in F21 herein;

f) aryloxy having the formula -O-aryl wherein aryl is defined in F21 herein;

g) halo selected from fluoro, chloro, bromo and iodo;

h) nitro;

i) heteroaryl as defined in F22 herein;

j) thiol;

k) thioalkoxy having the formula -S-alkyl, wherein alkyl is defined in A herein;

l) substituted thioalkoxy having the formula -S-substituted alkyl, wherein substituted alkyl is defined in F herein;

m) thioaryloxy having the formula -S-aryl wherein aryl is defined in F21 herein; and

n) trihalomethyl wherein halo is defined in I20 herein;

23) heterocyclic of from 1 to 15 ring carbon atoms and from 1 to 4 ring atoms selected from nitrogen, sulfur and oxygen, optionally substituted with from 1 to 5 substituents selected from:

a) alkyl as defined in A herein;

b) substituted alkyl as defined in F herein;

c) alkoxy as defined in F1 herein;

E'

d) substituted alkoxy as defined in F2 herein;

e) aryl as defined in F21 herein;

f) aryloxy having the formula -O-aryl wherein aryl is defined in F21 herein;

g) halo selected from fluoro, chloro, bromo and iodo;

h) nitro;

i) heteroaryl as defined in F22 herein;

j) thiol;

k) thioalkoxy having the formula -S-alkyl, wherein alkyl is defined in A herein;

l) substituted thioalkoxy having the formula -S-substituted alkyl, wherein substituted alkyl is defined in F herein;

m) thioaryloxy having the formula -S-aryl wherein aryl is defined in F21 herein; and

n) trihalomethyl wherein halo is selected from fluoro, chloro, bromo and iodo;

24) aryloxy of the formula -O-aryl wherein aryl is defined in F21 herein;

25) heteroaryloxy of the formula -O-heteroaryl wherein heteroaryl is defined in F22 herein;

26) hydroxyamino;

27) alkoxyamino wherein alkoxy is defined in F1 herein;

28) nitro;

29) -SO-alkyl wherein alkyl is defined in A herein;

30) -SO-substituted alkyl wherein substituted alkyl is defined in F herein;

31) -SO-aryl wherein aryl is defined in F21 herein;

32) -SO-heteroaryl wherein heteroaryl is defined in F22 herein;

33) $-SO_2$-alkyl wherein alkyl is defined in A herein;

34) $-SO_2$-substituted alkyl wherein substituted alkyl is defined in F herein;

35) $-SO_2$-aryl wherein aryl is defined in F21 herein;

36) $-SO_2$-heteroaryl wherein heteroaryl is defined in F22 herein;

37) mono- and dialkylamino wherein alkyl is defined in A herein;

38) mono- and di-substituted alkylamino wherein substituted alkyl is defined in F herein;

39) mono- and di-arylamino wherein aryl is defined in F21 herein;

40) mono- and di-heteroarylamino wherein heteroaryl is defined in F22 herein;

41) mono- and di-heterocyclicamino wherein heterocyclic is defined in F23 herein;

42) unsymmetric di-substituted amino having different substituents selected from alkyl, substituted alkyl, aryl, heteroaryl and heterocyclic wherein alkyl is defined in A herein; wherein substituted alkyl is defined in F herein; wherein aryl is defined in F21 herein; wherein heteroaryl is defined in F22 herein; and wherein heterocyclic is defined in F23 herein;

G) substituted alkenyl having from 1 to 3 substituents selected from the group consisting of:

1) alkoxy as defined in F1 herein;

2) substituted alkoxy as defined in F2 herein;

3) acyl as defined in F7 herein;

4) acylamino as defined in F8 herein;

5) acyloxy as defined in F9 herein;

6) amino;

7) aminoacyl as defined in F11 herein;

8) aminoacyloxy as defined in F12 herein;

9) cyano;

10) halogen selected from fluoro, chloro, bromo and iodo;

11) hydroxyl;

12) carboxyl;

E 1

13) carboxylalkyl as defined in F17 herein;

14) thiol;

15) thioalkoxy as defined in F19 herein;

16) substituted thioalkoxy as defined in F20 herein;

17) aryl as defined in F21 herein;

18) heteroaryl as defined in F22 herein;

19) heterocyclic as defined in F2 herein;

20) nitro;

21) -SO-alkyl wherein alkyl is defined in A herein;

22) -SO-substituted alkyl wherein substituted alkyl is defined in F herein;

23) -SO-aryl wherein aryl is defined in F21 herein;

24) -SO-heteroaryl wherein heteroaryl is defined in F22 herein;

25) $-SO_2$-alkyl wherein alkyl is defined in A herein;

26) $-SO_2$-substituted alkyl wherein substituted alkyl is defined in F herein;

27) $-SO_2$-aryl wherein aryl is defined in F21 herein;

28) $-SO_2$-heteroaryl wherein heteroaryl is defined in F22 herein;

29) mono- and dialkylamino wherein alkyl is defined in A herein;

30) mono- and di-substituted alkylamino wherein substituted alkyl is defined in F herein;

31) mono- and di-arylamino wherein aryl is defined in F21 herein;

32) mono- and di-heteroarylamino wherein heteroaryl is defined in F22 herein;

33) mono- and di-heterocyclicamino wherein heterocyclic is defined in F23 herein; and

34) unsymmetric di-substituted amino having different substituents selected from alkyl , substituted alkyl, aryl, heteroaryl and heterocyclic wherein alkyl is defined in A herein; wherein substituted alkyl is defined in F herein; wherein aryl is defined in F21 herein;

wherein heteroaryl is defined in F22 herein; and wherein heterocyclic is defined in F23 herein;

H) substituted alkynyl of from 1 to 3 substituents selected from:

1) alkoxy as defined in F1 herein;
2) substituted alkoxy as defined in F2 herein;
3) acyl as defined in F7 herein;
4) acylamino as defined in F8 herein;
5) acyloxy as defined in F9 herein;
6) amino;
7) aminoacyl as defined in F11 herein;
8) aminoacyloxy as defined in F12 herein;
9) cyano;
10) halogen selected from fluoro, chloro, bromo and iodo;
11) hydroxyl;
12) carboxyl;
13) carboxylalkyl as defined in F17 herein;
14) thiol;
15) thioalkoxy as defined in F19 herein;
16) substituted thioalkoxy as defined in F20 herein;
17) aryl as defined in F21 herein;
18) heteroaryl as defined in F22 herein;
19) heterocyclic as defined in F23 herein;
20) nitro;
21) -SO-alkyl wherein alkyl is defined in A herein;
22) -SO-substituted alkyl wherein substituted alkyl is defined in F herein;
23) -SO-aryl wherein aryl is defined in F21 herein;
24) -SO-heteroaryl wherein heteroaryl is defined in F22 herein;
25) $-SO_2$-alkyl wherein alkyl is defined in A herein;
26) $-SO_2$-substituted alkyl wherein substituted alkyl is defined in F herein;

27) $-SO_2$-aryl wherein aryl is defined in F21 herein;

28) $-SO_2$-heteroaryl wherein heteroaryl is defined in F22 herein;

29) mono- and dialkylamino wherein alkyl is defined in A herein;

30) mono- and di-substituted alkylamino wherein substituted alkyl is defined in F herein;

31) mono- and di-arylamino wherein aryl is defined in F21 herein;

32) mono- and di-heteroarylamino wherein heteroaryl is defined in F22 herein;

33) mono- and di-heterocyclicamino wherein heterocyclic is defined in F23 herein; and

34) unsymmetric di-substituted amino having different substituents selected from alkyl, substituted alkyl, aryl, heteroaryl and heterocyclic wherein alkyl is defined in A herein; wherein substituted alkyl is defined in F herein; wherein aryl is defined in F21 herein; wherein heteroaryl is defined in F22 herein; and wherein heterocyclic is defined in F23 herein;

I) substituted cycloalkyl having 3 to 12 carbon atoms and from 1 to 5 substituents selected from the group consisting of:

1) hydroxy;

2) acyl as defined in F7 herein;

3) acyloxy as defined in F9 herein;

4) alkyl as defined in A herein;

5) substituted alkyl as defined in F herein;

6) alkoxy as defined in F1 herein;

7) substituted alkoxy as defined in F2 herein;

8) alkenyl as defined in B herein;

9) substituted alkenyl as defined in G herein;

10) alkynyl as defined in C herein;

11) substituted alkynyl as defined in H herein;

12) amino;

13) aminoacyl as defined in F11 herein;

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14) alkaryl of the formula -alkylene-aryl having 8 carbon atoms in the alkylene moiety and aryl is defined in F21 herein;

15) aryl as defined in F21 herein;

16) aryloxy having the formula -O-aryl wherein aryl is defined in F21 herein;

17) carboxyl;

18) carboxylalkyl having the formula "-C(O)Oalkyl" wherein alkyl is defined in A herein;

19) cyano;

20) halo selected from fluoro, chloro, bromo and iodo;

21) nitro;

22) heteroaryl as defined in F22 herein;

23) thioalkoxy as defined in F19 herein;

24) substituted thioalkoxy as defined in F20 herein; and

25) trihalomethyl wherein halo is selected from fluoro, chloro, bromo and iodo;

J) substituted cycloalkenyl having from 4 to 8 carbon atoms and from 1 to 5 substituents selected from the group consisting of:

1) hydroxy;

2) acyl as defined in F7 herein;

3) acyloxy as defined in F9 herein;

4) alkyl as defined in A herein;

5) substituted alkyl as defined in F herein;

6) alkoxy as defined in F1 herein;

7) substituted alkoxy as defined in F2 herein;

8) alkenyl as defined in B herein;

9) substituted alkenyl as defined in G herein;

10) alkynyl as defined in C herein;

11) substituted alkynyl as defined in H herein;

12) amino;

13) aminoacyl as defined in F11 herein;

14) alkaryl of the formula -alkylene-aryl having 8 carbon atoms in the alkylene moiety and aryl is defined in F21 herein;

15) aryl as defined in F21 herein;

16) aryloxy having the formula -O-aryl wherein aryl is defined in F21 herein;

17) carboxyl;

18) carboxylalkyl having the formula "-C(O)Oalkyl" wherein alkyl is defined in A herein;

19) cyano;

20) halo selected from fluoro, chloro, bromo and iodo;

21) nitro;

22) heteroaryl as defined in F22 herein;

23) thioalkoxy as defined in F19 herein;

24) substituted thioalkoxy as defined in F20 herein; and

25) trihalomethyl wherein halo is selected from fluoro, chloro, bromo and iodo;

K) aryl as defined in F21 herein;

L) heteroaryl as defined in F22 herein; and

M) heterocyclic as defined in F23 herein;

Z' is represented by the formula -CX'X"-, -T-CH_2- or -T-C(O)- where T is selected from the group consisting of oxygen, sulfur, -NR^5 where R^5 is:

E 1

N) hydrogen;

O) acyl as defined in F7 herein;

P) alkyl as defined in A herein;

Q) aryl as defined in F21 herein; or

R) heteroaryl as defined in F22 herein;

X' is hydrogen, hydroxy or fluoro; X'' is hydrogen, hydroxy or fluoro, or X' and X'' together form an oxo group;

R^2 is selected from the group consisting of:

S) alkyl as defined in A herein;

T) alkenyl as defined in B herein;

U) alkynyl as defined in C herein;

V) substituted alkyl as defined in F herein;

W) substituted alkenyl as defined in G herein;

X) substituted alkynyl as defined in H herein;

Y) cycloalkyl as defined in D herein;

Z) aryl as defined in F21 herein;

AA) heteroaryl as defined in F22 herein;

BB) heterocyclic as defined in F23 herein;

BB^1) 2-aminopyrid-6-yl;

BB^2) 2-methylcyclopentyl;

BB^3) cyclohex-2-enyl; and

BB^4) -$(CH_2)_4NHC(O)OC(CH_3)_3$

W, together with $-C(H)_pC(=X)-$, forms a:

CC) cycloalkyl as defined in D herein;

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DD) cycloalkenyl as defined in E herein;

EE) heterocyclic as defined in F23 herein;

FF) substituted cycloalkyl as defined in I herein; or

GG) substituted cycloalkenyl group as defined in J herein;

wherein each of said cycloalkyl, cycloalkenyl, heterocyclic, substituted cycloalkyl or substituted cycloalkenyl group is ~~optionally~~ fused to form a bi- or multi-fused ring system with one or more ring structures selected from the group consisting of:

HH) cycloalkyl as defined in D herein;

II) cycloalkenyl as defined in E herein;

JJ) heterocyclic as defined in F23 herein;

KK) aryl as defined in F21 herein; and

LL) heteroaryl as defined in F22 herein;

which, in turn, each of such ring structures is optionally substituted with 1 to 4 substituents selected from the group consisting of:

MM) hydroxyl;

NN) halo as defined in F21 herein;

OO) alkoxy as defined in F1 herein;

PP) substituted alkoxy as defined in F2 herein;

QQ) thioalkoxy as defined in F19 herein;

RR) substituted thioalkoxy as defined in F20 herein;

SS) nitro;

TT) cyano;

UU) carboxyl;

VV) carboxyl esters;

WW) alkyl as defined in A herein;

XX) substituted alkyl as defined in F herein;

YY) alkenyl as defined in B herein;

ZZ) substituted alkenyl as defined in G herein;

AAA) alkynyl as defined in C herein;

BBB) substituted alkynyl as defined in H herein;

CCC) amino;

DDD) N-alkyl amino wherein alkyl is defined in A herein;

EEE) N,N-dialkyl amino wherein alkyl is defined in A herein;

FFF) N-substituted alkylamino wherein alkyl is defined in A herein;

GGG) N-alkyl N-substituted alkylamino wherein alkyl is defined in A herein;

HHH) N,N-disubstituted alkyl amino;

III) $-NHC(O)R^4$ where each R^4 is independently selected from the group consisting of:

1) alkyl as defined in A herein;

2) substituted alkyl as defined in F herein;

3) aryl as defined in F21 herein;

JJJ) $-NHSO_2R^4$ wherein R^4 is defined in III herein;

KKK) $-C(O)NH_2$;

LLL) $-C(O)NHR^4$ where R^4 is defined in III herein;

MMM) $-C(O)NR^4R^4$ where R^4 is defined in III herein;

NNN) $-S(O)R^4$ where R^4 is defined in III herein;

OOO) $-S(O)_2R^4$ where R^4 is defined in III herein;

PPP) $-S(O)_2NHR^4$ where R^4 is defined in III herein; and

QQQ) $-S(O)_2NR^4R^4$ where R^4 is defined in III herein;

X is selected from the group consisting of oxo (=O), thiooxo (=S), hydroxyl (-H, -OH), thiol (H, -SH) and hydro (H, H);

p is an integer equal to 0 or 1 such that when *p* is zero, the ring defined by W and $-C(H)_pC(=X)-$ is unsaturated at the carbon atom of ring attachment to NH and when *p* is one, the ring is saturated at the carbon atom of ring attachment to NH;

or pharmaceutically acceptable salts thereof;

E 1

with the following provisos:

RRR. when R^1 is 3,5-difluorophenyl, R^2 is $-CH_3$, Z' is $-CH_2-$, and *p* is 1, then W, together with >CH and >C=X, does not form a 2-(S)-indanol group;

SSS. when R^1 is phenyl, R^2 is $-CH_3$, Z' is $-CH_2-$, *p* is 1, then W, together with >CH and >C=X, does not form a trans-2-hydroxy-cyclohex-1-yl group;

TTT. when R^1 is cyclopropyl, R^2 is $-CH_3$, Z' is $-CH_2-$, and *p* is 1, then W, together with >CH and >C=X, does not form an N-methylcaprolactam group;

UUU. when R^1 is 4-chlorobenzoyl-CH_2-, R^2 is $-CH_3$, Z' is $-CH_2-$, and *p* is 1, then W, together with >CH and >C=X, does not form an 2,3-dihydro-1-methyl-5-phenyl-1H-1,4-benzodiazepin-2-one;

VVV. when R^1 is 2-phenylphenyl, R^2 is $-CH_3$, Z' is $-CH_2-$, and *p* is 1, then W, together with >CH and >C=X, does not form an 7-methyl-5,7-dihydro-6H-dibenz[b,d]azepin-6-one;

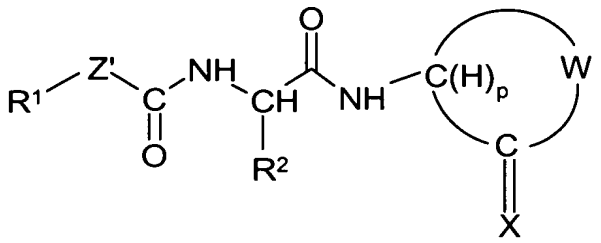
WWW. when R^1 is $CH_3OC(O)CH_2-$, R^2 is $-CH_3$, Z' is $-CH_2-$, and *p* is 1, then W, together with >CH and >C=X, does not form an 2,3-dihydro-1-(*t*-butylC(O)CH_2-)-5-(2-pyridyl)-1H-1,4-benzodiazepin-2-one;

XXX. when R^1 is 4-ethoxyphenyl, 2,4,6-trimethylphenyl, 4-phenylphenyl, $CH_3OC(O)CH_2-$, 4-$HOCH_2$-phenyl, 2,4,6-trifluorophenyl, 2-trifluoromethyl-4-fluorophenyl, or CH_3S-, R^2 is $-CH_3$, Z' is $-CH_2-$, and *p* is 1, then W, together with >CH and >C=X, does not form a 2,3-dihydro-1-(N,N-diethylamino-CH_2CH_2-)-5-(2-pyridyl)-1H-1,4-benzodiazepin-2-one;

YYY. when R^1 is 2,6-difluorophenyl, R^2 is $-CH_3$, Z' is -CH(OH)-, and *p* is 1, then W, together with >CH and >C=X, does not form a 2,3-dihydro-1-(N,N-diethylamino-CH_2CH_2-)-5-(2-pyridyl)-1H-1,4-benzodiazepin-2-one; and

ZZZ. when the ring defined by W and $-C(H)_pC(=X)-$ forms a cycloalkyl, then it does not form a cycloalkyl of from 3 to 8 carbon atoms optionally substituted with 1 to 3 alkyl groups.

119. (Currently Amended) A method for inhibiting β-amyloid peptide synthesis and/or release in a human subject thereby inhibiting onset of diseases mediated by β-amyloid peptide which method comprises administering to said human subject a pharmaceutical composition comprising a pharmaceutically inert carrier and an effective amount of a compound or a mixture of compounds of formula IA:



IA

wherein R^1 is selected from the group consisting of:

A) alkyl of from 1 to 10 carbon atoms;

B) alkenyl of from 2 to 10 carbon atoms and 1-2 sites of alkenyl unsaturation;

C) alkynyl of from 2 to 10 carbon atoms and from 1-2 sites of alkynyl unsaturation;

D) cycloalkyl of from 3 to 12 carbon atoms;

E) cycloalkenyl of from 4 to 8 carbon atoms;

F) substituted alkyl of from 1 to 10 carbon atoms, having from 1 to 5 substituents selected from:

1) alkoxy of from 1 to 10 carbon atoms;

2) substituted alkoxy of the formula substituted alkyl-O- where substituted alkyl is as defined in F herein;

3) cycloalkyl which is as defined in D herein;

4) substituted cycloalkyl is defined in I herein;

5) cycloalkenyl which is defined in E herein;

6) substituted cycloalkenyl which is defined in J herein;

7) acyl selected from alkyl-C(O)-, substituted alkyl-C(O)-,

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cycloalkyl-C(O)-, substituted cycloalkyl-C(O)-, aryl-C(O)-, heteroaryl-C(O)- and heterocyclic-C(O)- wherein alkyl is defined in A herein; wherein substituted alkyl is defined in F herein; wherein cycloalkyl is defined in D herein; wherein substituted cycloalkyl is defined in I herein; wherein aryl is defined in F21 herein; wherein heteroaryl is defined in F22 herein; and wherein heterocyclic is defined in F23 herein;

8) acylamino having the formula -C(O)NRR where each R is independently hydrogen, alkyl, substituted alkyl, aryl, heteroaryl, or heterocyclic wherein alkyl is defined in A herein; wherein substituted alkyl is defined in F herein; wherein aryl is defined in F21 herein; wherein heteroaryl is defined in F22 herein; and wherein heterocyclic is defined in F23 herein;

9) acyloxy selected from alkyl-C(O)O-, substituted alkyl-C(O)O-, cycloalkyl-C(O)O-, aryl-C(O)O-, heteroaryl-C(O)O-, and heterocyclic-C(O)O- wherein alkyl is defined in A herein; wherein substituted alkyl is defined in F herein; wherein cycloalkyl is defined in D herein; wherein aryl is defined in F21 herein; wherein heteroaryl is defined in F22 herein; and wherein heterocyclic is defined in F23 herein;

10) amino;

11) aminoacyl having the formula -NRC(O)R wherein each R is independently selected from the group consisting of hydrogen, alkyl, substituted alkyl, aryl, heteroaryl, and heterocyclic; wherein alkyl is defined in A herein; wherein substituted alkyl is defined in F herein; wherein aryl is defined in F21 herein; wherein heteroaryl is defined in F22 herein; and wherein heterocyclic is defined in F23 herein;

12) aminoacyloxy having the formula -NRC(O)OR wherein each R is independently selected from the group consisting of hydrogen, alkyl,

substituted alkyl, aryl, heteroaryl, and heterocyclic; wherein alkyl is defined in A herein; wherein substituted alkyl is defined in F herein; wherein aryl is defined in F21 herein; wherein heteroaryl is defined in F22 herein; and wherein heterocyclic is defined in F23 herein;

13) cyano;

14) halogen;

15) hydroxyl;

16) carboxyl;

17) carboxylalkyl having the formula "-C(O)Oalkyl" wherein alkyl is defined in A herein;

18) thiol;

19) thioalkoxy having the formula -S-alkyl, wherein alkyl is defined in A herein;

20) substituted thioalkoxy having the formula -S-substituted alkyl, wherein substituted alkyl is defined in F herein;

21) aryl having from 6 to 14 ring carbon atoms, optionally substituted with from 1 to 5 substituents selected from the group consisting of:

a) hydroxy;

b) acyl as defined in F7 herein;

c) acyloxy as defined in F9 herein;

d) alkyl as defined in A herein;

e) substituted alkyl as defined in F herein;

f) alkoxy as defined in F1 herein;

g) substituted alkoxy as defined in F2 herein;

h) alkenyl as defined in B herein;

i) substituted alkenyl as defined in G herein;

j) alkynyl as defined in C herein;

k) substituted alkynyl as defined in H herein;

l) amino;

E 1

m) aminoacyl as defined in F11 herein;

n) acylamino as defined in F8 herein;

o) alkaryl of the formula -alkylene-aryl having 8 carbon atoms in the alkylene moiety and aryl is defined in F21 herein;

p) aryl as defined in F21 herein;

q) aryloxy having the formula -O-aryl wherein aryl is defined in F21 herein;

r) azido;

s) carboxyl;

t) carboxylalkyl having the formula "-C(O)Oalkyl" wherein alkyl is defined in A herein;

u) cyano;

v) halo selected from fluoro, chloro, bromo and iodo;

w) nitro;

x) heteroaryl as defined in F22 herein;

y) heterocyclic as defined in F23 herein;

z) aminoacyloxy as defined in F12 herein;

aa) oxyacylamino having the formula -OC(O)NRR where each R is independently hydrogen, alkyl, substituted alkyl, aryl, heteroaryl, or heterocyclic wherein alkyl is defined in A herein; wherein substituted alkyl is defined in F herein; wherein aryl is defined in F21 herein; wherein heteroaryl is defined in F22 herein; and wherein heterocyclic is defined in F23 herein;

bb) thioalkoxy having the formula -S-alkyl, wherein alkyl is defined in A herein;

cc) substituted thioalkoxy having the formula -S-substituted alkyl, wherein substituted alkyl is defined in F herein;

E 1

dd) thioaryloxy having the formula -S-aryl wherein aryl is defined in F21 herein;

ee) thioheteroaryloxy having the formula -S-heteroaryl wherein heteroaryl is defined F22 herein;

ff) -SO-alkyl wherein alkyl is defined in A herein;

gg) -SO-substituted alkyl wherein substituted alkyl is defined in F herein;

hh) -SO-aryl wherein aryl is defined in F21 herein;

ii) -SO-heteroaryl wherein heteroaryl is defined in F22 herein;

jj) $-SO_2$-alkyl wherein alkyl is defined in A herein;

kk) $-SO_2$-substituted alkyl wherein substituted alkyl is defined in F herein;

ll) $-SO_2$-aryl wherein aryl is defined in F21 herein;

mm) $-SO_2$-heteroaryl wherein heteroaryl is defined in F22 herein;

nn) trihalomethyl wherein halo is defined in I20 herein;

oo) mono- and dialkylamino wherein alkyl is defined in A herein;

pp) mono- and di-substituted alkylamino wherein substituted alkyl is defined in F herein;

qq) mono- and di-arylamino wherein aryl is defined in F21 herein;

rr) mono- and di-heteroarylamino wherein heteroaryl is defined in F22 herein;

ss) mono- and di-heterocyclicamino wherein heterocyclic is defined in F23 herein;

tt) unsymmetric di-substituted amino having different substituents selected from alkyl, substituted alkyl, aryl, heteroaryl and heterocyclic wherein alkyl is defined in A herein; wherein substituted alkyl is defined in F herein; wherein aryl is defined in F22 herein; wherein heteroaryl is defined in F22 herein; and wherein heterocyclic is defined in F23 herein;

E'

22) heteroaryl of from 1 to 15 ring carbon atoms and 1 to 4 ring heteroatoms selected from oxygen, nitrogen and sulfur, optionally substituted with from 1 to 5 substituents selected from:

a) alkyl as defined in A herein;

b) substituted alkyl as defined in F herein;

c) alkoxy as defined in F1 herein;

d) substituted alkoxy as defined in F2 herein;

e) aryl as defined in F21 herein;

f) aryloxy having the formula -O-aryl wherein aryl is defined in F21 herein;

g) halo selected from fluoro, chloro, bromo and iodo;

h) nitro;

i) heteroaryl as defined in F22 herein;

j) thiol;

k) thioalkoxy having the formula -S-alkyl, wherein alkyl is defined in A herein;

l) substituted thioalkoxy having the formula -S-substituted alkyl, wherein substituted alkyl is defined in F herein;

m) thioaryloxy having the formula -S-aryl wherein aryl is defined in F21 herein; and

n) trihalomethyl wherein halo is defined in I20 herein;

23) heterocyclic of from 1 to 15 ring carbon atoms and from 1 to 4 ring atoms selected from nitrogen, sulfur and oxygen, optionally substituted with from 1 to 5 substituents selected from:

a) alkyl as defined in A herein;

b) substituted alkyl as defined in F herein;

c) alkoxy as defined in F1 herein;

d) substituted alkoxy as defined in F2 herein;

e) aryl as defined in F21 herein;

E1

f) aryloxy having the formula -O-aryl wherein aryl is defined in F21 herein;

g) halo selected from fluoro, chloro, bromo and iodo;

h) nitro;

i) heteroaryl as defined in F22 herein;

j) thiol;

k) thioalkoxy having the formula -S-alkyl, wherein alkyl is defined in A herein;

l) substituted thioalkoxy having the formula -S-substituted alkyl, wherein substituted alkyl is defined in F herein;

m) thioaryloxy having the formula -S-aryl wherein aryl is defined in F21 herein; and

n) trihalomethyl wherein halo is selected from fluoro, chloro, bromo and iodo;

24) aryloxy of the formula -O-aryl wherein aryl is defined in F21 herein;

25) heteroaryloxy of the formula -O-heteroaryl wherein heteroaryl is defined in F22 herein;

26) hydroxyamino;

27) alkoxyamino wherein alkoxy is defined in F1 herein;

28) nitro;

29) -SO-alkyl wherein alkyl is defined in A herein;

30) -SO-substituted alkyl wherein substituted alkyl is defined in F herein;

31) -SO-aryl wherein aryl is defined in F21 herein;

32) -SO-heteroaryl wherein heteroaryl is defined in F22 herein;

33) $-SO_2$-alkyl wherein alkyl is defined in A herein;

34) $-SO_2$-substituted alkyl wherein substituted alkyl is defined in F herein;

35) $-SO_2$-aryl wherein aryl is defined in F21 herein;

36) $-SO_2$-heteroaryl wherein heteroaryl is defined in F22 herein;

37) mono- and dialkylamino wherein alkyl is defined in A herein;

38) mono- and di-substituted alkylamino wherein substituted alkyl is defined in F herein;

E' 39) mono- and di-arylamino wherein aryl is defined in F21 herein;

40) mono- and di-heteroarylamino wherein heteroaryl is defined in F22 herein;

42) mono- and di-heterocyclicamino wherein heterocyclic is defined in F23 herein;

43) unsymmetric di-substituted amino having different substituents selected from alkyl, substituted alkyl, aryl, heteroaryl and heterocyclic wherein alkyl is defined in A herein; wherein substituted alkyl is defined in F herein; wherein aryl is defined in F21 herein; wherein heteroaryl is defined in F22 herein; and wherein heterocyclic is defined in F23 herein;

G) substituted alkenyl having from 1 to 3 substituents selected from the group consisting of:

1) alkoxy as defined in F1 herein;

2) substituted alkoxy as defined in F2 herein;

3) acyl as defined in F7 herein;

4) acylamino as defined in F8 herein;

5) acyloxy as defined in F9 herein;

6) amino;

7) aminoacyl as defined in F11 herein;

8) aminoacyloxy as defined in F12 herein;

9) cyano;

10) halogen selected from fluoro, chloro, bromo and iodo;

11) hydroxyl;

12) carboxyl;

13) carboxylalkyl as defined in F17 herein;

14) thiol;

15) thioalkoxy as defined in F19 herein;

16) substituted thioalkoxy as defined in F20 herein;

17) aryl as defined in F21 herein;

18) heteroaryl as defined in F22 herein;

19) heterocyclic as defined in F23 herein;

20) nitro;

21) -SO-alkyl wherein alkyl is defined in A herein;

22) -SO-substituted alkyl wherein substituted alkyl is defined in F herein;

23) -SO-aryl wherein aryl is defined in F21 herein;

24) -SO-heteroaryl wherein heteroaryl is defined in F22 herein;

25) $-SO_2$-alkyl wherein alkyl is defined in A herein;

26) $-SO_2$-substituted alkyl wherein substituted alkyl is defined in F herein;

27) $-SO_2$-aryl wherein aryl is defined in F21 herein;

28) $-SO_2$-heteroaryl wherein heteroaryl is defined in F22 herein;

29) mono- and dialkylamino wherein alkyl is defined in A herein;

30) mono- and di-substituted alkylamino wherein substituted alkyl is defined in F herein;

31) mono- and di-arylamino wherein aryl is defined in F21 herein;

32) mono- and di-heteroarylamino wherein heteroaryl is defined in F22 herein;

33) mono- and di-heterocyclicamino wherein heterocyclic is defined in F23 herein; and

34) unsymmetric di-substituted amino having different substituents selected from alkyl, substituted alkyl, aryl, heteroaryl and heterocyclic wherein alkyl is defined in A herein; wherein substituted alkyl is defined in F herein; wherein aryl is defined in F21 herein; wherein heteroaryl is defined in F22 herein; and wherein heterocyclic is defined in F23 herein;

H) substituted alkynyl of from 1 to 3 substituents selected from:

E1

1) alkoxy as defined in F1 herein;
2) substituted alkoxy as defined in F2 herein;
3) acyl as defined in F7 herein;
4) acylamino as defined in F8 herein;
5) acyloxy as defined in F9 herein;
6) amino;
7) aminoacyl as defined in F11 herein;
8) aminoacyloxy as defined in F12 herein;
9) cyano;
10) halogen selected from fluoro, chloro, bromo and iodo;
11) hydroxyl;
12) carboxyl;
13) carboxylalkyl as defined in F17 herein;
14) thiol;
15) thioalkoxy as defined in F19 herein;
16) substituted thioalkoxy as defined in F20 herein;
17) aryl as defined in F21 herein;
18) heteroaryl as defined in F22 herein;
19) heterocyclic as defined in F23 herein;
20) nitro;
21) -SO-alkyl wherein alkyl is defined in A herein;
22) -SO-substituted alkyl wherein substituted alkyl is defined in F herein;
23) -SO-aryl wherein aryl is defined in F21 herein;
24) -SO-heteroaryl wherein heteroaryl is defined in F22 herein;
25) $-SO_2$-alkyl wherein alkyl is defined in A herein;
26) $-SO_2$-substituted alkyl wherein substituted alkyl is defined in F herein;
27) $-SO_2$-aryl wherein aryl is defined in F21 herein;
28) $-SO_2$-heteroaryl wherein heteroaryl is defined in F22 herein;
29) mono- and dialkylamino wherein alkyl is defined in A herein;

30) mono- and di-substituted alkylamino wherein substituted alkyl is defined in F herein;

31) mono- and di-arylamino wherein aryl is defined in F21 herein;

32) mono- and di-heteroarylamino wherein heteroaryl is defined in F22 herein;

E'

33) mono- and di-heterocyclicamino wherein heterocyclic is defined in F23 herein; and

34) unsymmetric di-substituted amino having different substituents selected from alkyl, substituted alkyl, aryl, heteroaryl and heterocyclic wherein alkyl is defined in A herein; wherein substituted alkyl is defined in F herein; wherein aryl is defined in F21 herein; wherein heteroaryl is defined in F21 herein; and wherein heterocyclic is defined in F23 herein;

I) substituted cycloalkyl having 3 to 12 carbon atoms and from 1 to 5 substituents selected from the group consisting of:

1) hydroxy;

2) acyl as defined in F7 herein;

3) acyloxy as defined in F9 herein;

4) alkyl as defined in A herein;

5) substituted alkyl as defined in F herein;

6) alkoxy as defined in F1 herein;

7) substituted alkoxy as defined in F2 herein;

8) alkenyl as defined in B herein;

9) substituted alkenyl as defined in G herein;

10) alkynyl as defined in C herein;

11) substituted alkynyl as defined in H herein;

12) amino;

13) aminoacyl as defined in F11 herein;

14) alkaryl of the formula -alkylene-aryl having 8 carbon atoms in the alkylene moiety and aryl is defined in F21 herein;

15) aryl as defined in F21 herein;

16) aryloxy having the formula -O-aryl wherein aryl is defined in F21 herein;

E1

17) carboxyl;

18) carboxylalkyl having the formula "-C(O)Oalkyl" wherein alkyl is defined in A herein;

19) cyano;

20) halo selected from fluoro, chloro, bromo and iodo;

21) nitro;

22) heteroaryl as defined in F22 herein;

23) thioalkoxy as defined in F19 herein;

24) substituted thioalkoxy as defined in F20 herein; and

25) trihalomethyl wherein halo is selected from fluoro, chloro, bromo and iodo;

J) substituted cycloalkenyl having from 4 to 8 carbon atoms and from 1 to 5 substituents selected from the group consisting of:

1) hydroxy;

2) acyl as defined in F7 herein;

3) acyloxy as defined in F9 herein;

4) alkyl as defined in A herein;

5) substituted alkyl as defined in F herein;

6) alkoxy as defined in F1 herein;

7) substituted alkoxy as defined in F2 herein;

8) alkenyl as defined in B herein;

9) substituted alkenyl as defined in G herein;

10) alkynyl as defined in C herein;

11) substituted alkynyl as defined in H herein;

12) amino;

13) aminoacyl as defined in F11 herein;

14) alkaryl of the formula -alkylene-aryl having 8 carbon atoms in the alkylene moiety and aryl is defined in F21 herein;

15) aryl as defined in F21 herein;

16) aryloxy having the formula -O-aryl wherein aryl is defined in F21 herein;

17) carboxyl;

18) carboxylalkyl having the formula "-C(O)Oalkyl" wherein alkyl is defined in A herein;

19) cyano;

20) halo selected from fluoro, chloro, bromo and iodo;

21) nitro;

22) heteroaryl as defined in F22 herein;

23) thioalkoxy as defined in F19 herein;

24) substituted thioalkoxy as defined in F20 herein; and

25) trihalomethyl wherein halo is selected from fluoro, chloro, bromo and iodo;

K) aryl as defined in F21 herein;

L) heteroaryl as defined in F22 herein; and

M) heterocyclic as defined in F23 herein;

Z' is represented by the formula -CX'X"-, -T-CH_2- or -T-C(O)- where T is selected from the group consisting of oxygen, sulfur, -NR^5 where R^5 is:

N) hydrogen;

O) acyl as defined in F7 herein;

E' P) alkyl as defined in A herein;

Q) aryl as defined in F21 herein; or

R) heteroaryl as defined in F22 herein;

X' is hydrogen, hydroxy or fluoro; X'' is hydrogen, hydroxy or fluoro, or X' and X'' together form an oxo group;

R^2 is selected from the group consisting of:

S) alkyl as defined in A herein;

T) alkenyl as defined in B herein;

U) alkynyl as defined in C herein;

V) substituted alkyl as defined in F herein;

W) substituted alkenyl as defined in G herein;

X) substituted alkynyl as defined in H herein;

Y) cycloalkyl as defined in D herein;

Z) aryl as defined in F21 herein;

AA) heteroaryl as defined in F22 herein;

BB) heterocyclic as defined in F23 herein;

BB^1) 2-aminopyrid-6-yl;

BB^2) 2-methylcyclopentyl;

BB^3) cyclohex-2-enyl; and

BB^4) -$(CH_2)_4NHC(O)OC(CH_3)_3$

W, together with $-C(H)_pC(=X)-$, forms a:

CC) cycloalkyl as defined in D herein;

DD) cycloalkenyl as defined in E herein;

EE) heterocyclic as defined in F23 herein;

E'

FF) substituted cycloalkyl as defined in I herein; or

GG) substituted cycloalkenyl group as defined in J herein;

wherein each of said cycloalkyl, cycloalkenyl, heterocyclic, substituted cycloalkyl or substituted cycloalkenyl group is ~~optionally~~ fused to form a bi- or multi-fused ring system with one or more ring structures selected from the group consisting of:

HH) cycloalkyl as defined in D herein;

II) cycloalkenyl as defined in E herein;

JJ) heterocyclic as defined in F23 herein;

KK) aryl as defined in F21 herein; and

LL) heteroaryl as defined in F22 herein;

which, in turn, each of such ring structures is optionally substituted with 1 to 4 substituents selected from the group consisting of:

MM) hydroxyl;

NN) halo as defined in F21 herein;

OO) alkoxy as defined in F1 herein;

PP) substituted alkoxy as defined in F2 herein;

QQ) thioalkoxy as defined in F19 herein;

RR) substituted thioalkoxy as defined in F20 herein;

SS) nitro;

TT) cyano;

UU) carboxyl;

VV) carboxyl esters;

WW) alkyl as defined in A herein;

XX) substituted alkyl as defined in F herein;

YY) alkenyl as defined in B herein;

ZZ) substituted alkenyl as defined in G herein;

AAA) alkynyl as defined in C herein;

BBB) substituted alkynyl as defined in H herein;

CCC) amino;

DDD) N-alkyl amino wherein alkyl is defined in A herein;

EEE) N,N-dialkyl amino wherein alkyl is defined in A herein;

FFF) N-substituted alkylamino wherein alkyl is defined in A herein;

GGG) N-alkyl N-substituted alkylamino wherein alkyl is defined in A herein;

HHH) N,N-disubstituted alkyl amino;

III) $-NHC(O)R^4$ where each R^4 is independently selected from the group consisting of:

1) alkyl as defined in A herein;

2) substituted alkyl as defined in F herein;

3) aryl as defined in F21 herein;

JJJ) $-NHSO_2R^4$ wherein R^4 is defined in III herein;

KKK) $-C(O)NH_2$;

LLL) $-C(O)NHR^4$ where R^4 is defined in III herein;

MMM) $-C(O)NR^4R^4$ where R^4 is defined in III herein;

NNN) $-S(O)R^4$ where R^4 is defined in III herein;

OOO) $-S(O)_2R^4$ where R^4 is defined in III herein;

PPP) $-S(O)_2NHR^4$ where R^4 is defined in III herein; and

QQQ) $-S(O)_2NR^4R^4$ where R^4 is defined in III herein;

X is selected from the group consisting of oxo (=O), thiooxo (=S), hydroxyl (-H, -OH), thiol (H, -SH) and hydro (H, H);

p is an integer equal to 0 or 1 such that when *p* is zero, the ring defined by W and $-C(H)_pC(=X)-$ is unsaturated at the carbon atom of ring attachment to NH and when *p* is one, the ring is saturated at the carbon atom of ring attachment to NH;

or pharmaceutically acceptable salts thereof;

with the following provisos:

RRR. when R^1 is 3,5-difluorophenyl, R^2 is $-CH_3$, Z′ is $-CH_2-$, and *p* is 1, then W, together with >CH and >C=X, does not form a 2-(S)-indanol group;

SSS. when R^1 is phenyl, R^2 is $-CH_3$, Z′ is $-CH_2-$, *p* is 1, then W, together with >CH and >C=X, does not form a trans-2-hydroxy-cyclohex-1-yl group;

TTT. when R^1 is cyclopropyl, R^2 is $-CH_3$, Z′ is $-CH_2-$, and *p* is 1, then W, together with >CH and >C=X, does not form an N-methylcaprolactam group;

UUU. when R^1 is 4-chlorobenzoyl-CH_2-, R^2 is $-CH_3$, Z′ is $-CH_2-$, and *p* is 1, then W, together with >CH and >C=X, does not form an 2,3-dihydro-1-methyl-5-phenyl-1H-1,4-benzodiazepin-2-one;

VVV. when R^1 is 2-phenylphenyl, R^2 is $-CH_3$, Z′ is $-CH_2-$, and *p* is 1, then W, together with >CH and >C=X, does not form an 7-methyl-5,7-dihydro-6H-dibenz[b,d]azepin-6-one;

WWW. when R^1 is $CH_3OC(O)CH_2-$, R^2 is $-CH_3$, Z′ is $-CH_2-$, and *p* is 1, then W, together with >CH and >C=X, does not form an 2,3-dihydro-1-(*t*-butylC(O)CH_2-)-5-(2-pyridyl)-1H-1,4-benzodiazepin-2-one;

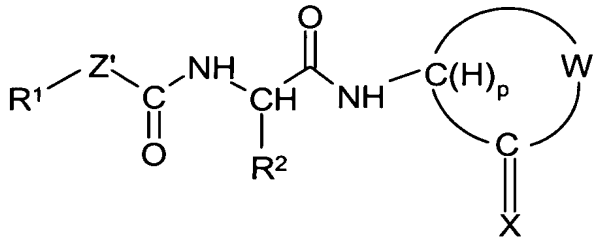
XXX. when R^1 is 4-ethoxyphenyl, 2,4,6-trimethylphenyl, 4-phenylphenyl, $CH_3OC(O)CH_2-$, 4-$HOCH_2-$phenyl, 2,4,6-trifluorophenyl, 2-trifluoromethyl-4-fluorophenyl, or CH_3S-, R^2 is $-CH_3$, Z′ is $-CH_2-$, and *p* is 1, then W, together with >CH and >C=X, does not form a 2,3-dihydro-1-(N,N-diethylamino-CH_2CH_2-)-5-(2-pyridyl)-1H-1,4-benzodiazepin-2-one;

YYY. when R^1 is 2,6-difluorophenyl, R^2 is $-CH_3$, Z′ is -CH(OH)-, and *p* is 1, then W, together with >CH and >C=X, does not form a 2,3-dihydro-1-(N,N-diethylamino-CH_2CH_2-)-5-(2-pyridyl)-1H-1,4-benzodiazepin-2-one;

ZZZ. when the ring defined by W and $-C(H)_pC(=X)-$ forms a cycloalkyl, then it does not form a cycloalkyl of from 3 to 8 carbon atoms optionally substituted with 1 to 3 alkyl groups.

120. (Currently Amended) A method for treating a human subject with AD in order to inhibit further deterioration in the condition of said human subject which method comprises administering to said subject a pharmaceutical composition comprising a pharmaceutically inert carrier and an effective amount of a compound or a mixture of compounds of formula IA:

E1



IA

wherein R^1 is selected from the group consisting of:

A) alkyl of from 1 to 10 carbon atoms;

B) alkenyl of from 2 to 10 carbon atoms and 1-2 sites of alkenyl unsaturation;

C) alkynyl of from 2 to 10 carbon atoms and from 1-2 sites of alkynyl unsaturation;

D) cycloalkyl of from 3 to 12 carbon atoms;

E) cycloalkenyl of from 4 to 8 carbon atoms;

F) substituted alkyl of from 1 to 10 carbon atoms, having from 1 to 5 substituents selected from:

1) alkoxy of from 1 to 10 carbon atoms;

2) substituted alkoxy of the formula substituted alkyl-O- where substituted alkyl is as defined in F herein;

3) cycloalkyl which is as defined in D herein;

4) substituted cycloalkyl is defined in I herein;

5) cycloalkenyl which is defined in E herein;

6) substituted cycloalkenyl which is defined in J herein;

7) acyl selected from alkyl-C(O)-, substituted alkyl-C(O)-,

cycloalkyl-C(O)-, substituted cycloalkyl-C(O)-, aryl-C(O)-, heteroaryl-C(O)- and heterocyclic-C(O)- wherein alkyl is defined in A herein; wherein substituted alkyl is defined in F herein; wherein cycloalkyl is defined in D herein; wherein substituted cycloalkyl is defined in I herein; wherein aryl is defined in F21 herein; wherein heteroaryl is defined in F22 herein; and wherein heterocyclic is defined in F23 herein;

E1

8) acylamino having the formula -C(O)NRR where each R is independently hydrogen, alkyl, substituted alkyl, aryl, heteroaryl, or heterocyclic wherein alkyl is defined in A herein; wherein substituted alkyl is defined in F herein; wherein aryl is defined in F21 herein; wherein heteroaryl is defined in F22 herein; and wherein heterocyclic is defined in F23 herein;

9) acyloxy selected from alkyl-C(O)O-, substituted alkyl-C(O)O-, cycloalkyl-C(O)O-, aryl-C(O)O-, heteroaryl-C(O)O-, and heterocyclic-C(O)O- wherein alkyl is defined in A herein; wherein substituted alkyl is defined in F herein; wherein cycloalkyl is defined in D herein; wherein aryl is defined in F21 herein; wherein heteroaryl is defined in F22 herein; and wherein heterocyclic is defined in F23 herein;

10) amino;

11) aminoacyl having the formula -NRC(O)R wherein each R is independently selected from the group consisting of hydrogen, alkyl, substituted alkyl, aryl, heteroaryl, and heterocyclic; wherein alkyl is defined in A herein; wherein substituted alkyl is defined in F herein; wherein aryl is defined in F21 herein; wherein heteroaryl is defined in F22 herein; and wherein heterocyclic is defined in F23 herein;

12) aminoacyloxy having the formula -NRC(O)OR wherein each R is independently selected from the group consisting of hydrogen, alkyl,

substituted alkyl, aryl, heteroaryl, and heterocyclic; wherein alkyl is defined in A herein; wherein substituted alkyl is defined in F herein; wherein aryl is defined in F21 herein; wherein heteroaryl is defined in F22 herein; and wherein heterocyclic is defined in F23 herein;

E1

13) cyano;

14) halogen;

15) hydroxyl;

16) carboxyl;

17) carboxylalkyl having the formula "-C(O)Oalkyl" wherein alkyl is defined in A herein;

18) thiol;

19) thioalkoxy having the formula -S-alkyl, wherein alkyl is defined in A herein;

20) substituted thioalkoxy having the formula -S-substituted alkyl, wherein substituted alkyl is defined in F herein;

21) aryl having from 6 to 14 ring carbon atoms, optionally substituted with from 1 to 5 substituents selected from the group consisting of:

a) hydroxy;

b) acyl as defined in F7 herein;

c) acyloxy as defined in F9 herein;

d) alkyl as defined in A herein;

e) substituted alkyl as defined in F herein;

f) alkoxy as defined in F1 herein;

g) substituted alkoxy as defined in F2 herein;

h) alkenyl as defined in B herein;

i) substituted alkenyl as defined in G herein;

j) alkynyl as defined in C herein;

k) substituted alkynyl as defined in H herein;

l) amino;

E1

m) aminoacyl as defined in F11 herein;

n) acylamino as defined in F8 herein;

o) alkaryl of the formula -alkylene-aryl having 8 carbon atoms in the alkylene moiety and aryl is defined in F21 herein;

p) aryl as defined in F21 herein;

q) aryloxy having the formula -O-aryl wherein aryl is defined in F21 herein;

r) azido;

s) carboxyl;

t) carboxylalkyl having the formula "-C(O)Oalkyl" wherein alkyl is defined in A herein;

u) cyano;

v) halo selected from fluoro, chloro, bromo and iodo;

w) nitro;

x) heteroaryl as defined in F22 herein;

y) heterocyclic as defined in F23 herein;

z) aminoacyloxy as defined in F12 herein;

aa) oxyacylamino having the formula -OC(O)NRR where each R is independently hydrogen, alkyl, substituted alkyl, aryl, heteroaryl, or heterocyclic wherein alkyl is defined in A herein; wherein substituted alkyl is defined in F herein; wherein aryl is defined in F21 herein; wherein heteroaryl is defined in F22 herein; and wherein heterocyclic is defined in F23 herein;

bb) thioalkoxy having the formula -S-alkyl, wherein alkyl is defined in A herein;

cc) substituted thioalkoxy having the formula -S-substituted alkyl, wherein substituted alkyl is defined in F herein;

dd) thioaryloxy having the formula -S-aryl wherein aryl is defined in F21 herein;

ee) thioheteroaryloxy having the formula -S-heteroaryl wherein heteroaryl is defined F22 herein;

E'

ff) -SO-alkyl wherein alkyl is defined in A herein;

gg) -SO-substituted alkyl wherein substituted alkyl is defined in F herein;

hh) -SO-aryl wherein aryl is defined in F21 herein;

ii) -SO-heteroaryl wherein heteroaryl is defined in F22 herein;

jj) $-SO_2$-alkyl wherein alkyl is defined in A herein;

kk) $-SO_2$-substituted alkyl wherein substituted alkyl is defined in F herein;

ll) $-SO_2$-aryl wherein aryl is defined in F21 herein;

mm) $-SO_2$-heteroaryl wherein heteroaryl is defined in F22 herein;

nn) trihalomethyl wherein halo is defined in I20 herein;

oo) mono- and dialkylamino wherein alkyl is defined in A herein;

pp) mono- and di-substituted alkylamino wherein substituted alkyl is defined in F herein;

qq) mono- and di-arylamino wherein aryl is defined in F21 herein;

rr) mono- and di-heteroarylamino wherein heteroaryl is defined in F22 herein;

ss) mono- and di-heterocyclicamino wherein heterocyclic is defined in F23 herein;

tt) unsymmetric di-substituted amino having different substituents selected from alkyl, substituted alkyl, aryl, heteroaryl and heterocyclic wherein alkyl is defined in A herein; wherein substituted alkyl is defined in F herein; wherein aryl is defined in F21 herein; wherein heteroaryl is defined in F22 herein; and wherein heterocyclic is defined in F23 herein;

22) heteroaryl of from 1 to 15 ring carbon atoms and 1 to 4 ring heteroatoms selected from oxygen, nitrogen and sulfur, optionally substituted with from 1 to 5 substituents selected from:

a) alkyl as defined in A herein;

b) substituted alkyl as defined in F herein;

c) alkoxy as defined in F1 herein;

d) substituted alkoxy as defined in F2 herein;

e) aryl as defined in F21 herein;

f) aryloxy having the formula -O-aryl wherein aryl is defined in F21 herein;

g) halo selected from fluoro, chloro, bromo and iodo;

h) nitro;

i) heteroaryl as defined in F22 herein;

j) thiol;

k) thioalkoxy having the formula -S-alkyl, wherein alkyl is defined in A herein;

l) substituted thioalkoxy having the formula -S-substituted alkyl, wherein substituted alkyl is defined in F herein;

m) thioaryloxy having the formula -S-aryl wherein aryl is defined in F21 herein; and

n) trihalomethyl wherein halo is defined in I20 herein;

23) heterocyclic of from 1 to 15 ring carbon atoms and from 1 to 4 ring atoms selected from nitrogen, sulfur and oxygen, optionally substituted with from 1 to 5 substituents selected from:

a) alkyl as defined in A herein;

b) substituted alkyl as defined in F herein;

c) alkoxy as defined in F1 herein;

d) substituted alkoxy as defined in F2 herein;

e) aryl as defined in F21 herein;

f) aryloxy having the formula -O-aryl wherein aryl is defined in F21 herein;

g) halo selected from fluoro, chloro, bromo and iodo;

h) nitro;

i) heteroaryl as defined in F22 herein;

E1

j) thiol;

k) thioalkoxy having the formula -S-alkyl, wherein alkyl is defined in A herein;

l) substituted thioalkoxy having the formula -S-substituted alkyl, wherein substituted alkyl is defined in F herein;

m) thioaryloxy having the formula -S-aryl wherein aryl is defined in F21 herein; and

n) trihalomethyl wherein halo is selected from fluoro, chloro, bromo and iodo;

24) aryloxy of the formula -O-aryl wherein aryl is defined in F21 herein;

25) heteroaryloxy of the formula -O-heteroaryl wherein heteroaryl is defined in F22 herein;

26) hydroxyamino;

27) alkoxyamino wherein alkoxy is defined in F1 herein;

28) nitro;

29) -SO-alkyl wherein alkyl is defined in A herein;

30) -SO-substituted alkyl wherein substituted alkyl is defined in F herein;

31) -SO-aryl wherein aryl is defined in F21 herein;

32) -SO-heteroaryl wherein heteroaryl is defined in F22 herein;

33) $-SO_2$-alkyl wherein alkyl is defined in A herein;

34) $-SO_2$-substituted alkyl wherein substituted alkyl is defined in F herein;

35) $-SO_2$-aryl wherein aryl is defined in F21 herein;

36) $-SO_2$-heteroaryl wherein heteroaryl is defined in F22 herein;

37) mono- and dialkylamino wherein alkyl is defined in A herein;

38) mono- and di-substituted alkylamino wherein substituted alkyl is defined in F herein;

39) mono- and di-arylamino wherein aryl is defined in F21 herein;

40) mono- and di-heteroarylamino wherein heteroaryl is defined in F22 herein;

E1 41) mono- and di-heterocyclicamino wherein heterocyclic is defined in F23 herein;

42) unsymmetric di-substituted amino having different substituents selected from alkyl, substituted alkyl, aryl, heteroaryl and heterocyclic wherein alkyl is defined in A herein; wherein substituted alkyl is defined in F herein; wherein aryl is defined in F21 herein; wherein heteroaryl is defined in F22 herein; and wherein heterocyclic is defined in F23 herein;

G) substituted alkenyl having from 1 to 3 substituents selected from the group consisting of:

1) alkoxy as defined in F1 herein;

2) substituted alkoxy as defined in F2 herein;

3) acyl as defined in F7 herein;

4) acylamino as defined in F8 herein;

5) acyloxy as defined in F9 herein;

6) amino;

7) aminoacyl as defined in F11 herein;

8) aminoacyloxy as defined in F12 herein;

9) cyano;

10) halogen selected from fluoro, chloro, bromo and iodo;

11) hydroxyl;

12) carboxyl;

13) carboxylalkyl as defined in F17 herein;

14) thiol;

15) thioalkoxy as defined in F19 herein;

16) substituted thioalkoxy as defined in F20 herein;

17) aryl as defined in F21 herein;

E1

18) heteroaryl as defined in F22 herein;

19) heterocyclic as defined in F23 herein;

20) nitro;

21) -SO-alkyl wherein alkyl is defined in A herein;

22) -SO-substituted alkyl wherein substituted alkyl is defined in F herein;

23) -SO-aryl wherein aryl is defined in F21 herein;

24) -SO-heteroaryl wherein heteroaryl is defined in F23 herein;

25) $-SO_2$-alkyl wherein alkyl is defined in A herein;

26) $-SO_2$-substituted alkyl wherein substituted alkyl is defined in F herein;

27) $-SO_2$-aryl wherein aryl is defined in F21 herein;

28) $-SO_2$-heteroaryl wherein heteroaryl is defined in F22 herein;

29) mono- and dialkylamino wherein alkyl is defined in A herein;

30) mono- and di-substituted alkylamino wherein substituted alkyl is defined in F herein;

31) mono- and di-arylamino wherein aryl is defined in F21 herein;

32) mono- and di-heteroarylamino wherein heteroaryl is defined in F22 herein;

33) mono- and di-heterocyclicamino wherein heterocyclic is defined in F23 herein; and

34) unsymmetric di-substituted amino having different substituents selected from alkyl , substituted alkyl, aryl, heteroaryl and heterocyclic wherein alkyl is defined in A herein; wherein substituted alkyl is defined in F herein; wherein aryl is defined in F21 herein; wherein heteroaryl is defined in F22 herein; and wherein heterocyclic is defined in F23 herein;

H) substituted alkynyl of from 1 to 3 substituents selected from:

E'

1) alkoxy as defined in F1 herein;
2) substituted alkoxy as defined in F2 herein;
3) acyl as defined in F7 herein;
4) acylamino as defined in F8 herein;
5) acyloxy as defined in F9 herein;
6) amino;
7) aminoacyl as defined in F11 herein;
8) aminoacyloxy as defined in F12 herein;
9) cyano;
10) halogen selected from fluoro, chloro, bromo and iodo;
11) hydroxyl;
12) carboxyl;
13) carboxylalkyl as defined in F17 herein;
14) thiol;
15) thioalkoxy as defined in F19 herein;
16) substituted thioalkoxy as defined in F20 herein;
17) aryl as defined in F21 herein;
18) heteroaryl as defined in F22 herein;
19) heterocyclic as defined in F23 herein;
20) nitro;
21) -SO-alkyl wherein alkyl is defined in A herein;
22) -SO-substituted alkyl wherein substituted alkyl is defined in F herein;
23) -SO-aryl wherein aryl is defined in F21 herein;
24) -SO-heteroaryl wherein heteroaryl is defined in F22 herein;
25) $-SO_2$-alkyl wherein alkyl is defined in A herein;
26) $-SO_2$-substituted alkyl wherein substituted alkyl is defined in F herein;
27) $-SO_2$-aryl wherein aryl is defined in F21 herein;
28) $-SO_2$-heteroaryl wherein heteroaryl is defined in F22 herein;
29) mono- and dialkylamino wherein alkyl is defined in A herein;

30) mono- and di-substituted alkylamino wherein substituted alkyl is defined in F herein;

31) mono- and di-arylamino wherein aryl is defined in F21 herein;

E' 32) mono- and di-heteroarylamino wherein heteroaryl is defined in F22 herein;

33) mono- and di-heterocyclicamino wherein heterocyclic is defined in F23 herein; and

34) unsymmetric di-substituted amino having different substituents selected from alkyl, substituted alkyl, aryl, heteroaryl and heterocyclic wherein alkyl is defined in A herein; wherein substituted alkyl is defined in F herein; wherein aryl is defined in F21 herein; wherein heteroaryl is defined in F22 herein; and wherein heterocyclic is defined in F23 herein;

I) substituted cycloalkyl having 3 to 12 carbon atoms and from 1 to 5 substituents selected from the group consisting of:

1) hydroxy;

2) acyl as defined in F7 herein;

3) acyloxy as defined in F9 herein;

4) alkyl as defined in A herein;

5) substituted alkyl as defined in F herein;

6) alkoxy as defined in F1 herein;

7) substituted alkoxy as defined in F2 herein;

8) alkenyl as defined in B herein;

9) substituted alkenyl as defined in G herein;

10) alkynyl as defined in C herein;

11) substituted alkynyl as defined in H herein;

12) amino;

13) aminoacyl as defined in F11 herein;

14) alkaryl of the formula -alkylene-aryl having 8 carbon atoms in the alkylene moiety and aryl is defined in F21 herein;

15) aryl as defined in F21 herein;

16) aryloxy having the formula -O-aryl wherein aryl is defined in F21 herein;

17) carboxyl;

18) carboxylalkyl having the formula "-C(O)Oalkyl" wherein alkyl is defined in A herein;

19) cyano;

20) halo selected from fluoro, chloro, bromo and iodo;

21) nitro;

22) heteroaryl as defined in F22 herein;

23) thioalkoxy as defined in F19 herein;

24) substituted thioalkoxy as defined in F20 herein; and

25) trihalomethyl wherein halo is selected from fluoro, chloro, bromo and iodo;

J) substituted cycloalkenyl having from 4 to 8 carbon atoms and from 1 to 5 substituents selected from the group consisting of:

1) hydroxy;

2) acyl as defined in F7 herein;

3) acyloxy as defined in F9 herein;

4) alkyl as defined in A herein;

5) substituted alkyl as defined in F herein;

6) alkoxy as defined in F1 herein;

7) substituted alkoxy as defined in F2 herein;

8) alkenyl as defined in B herein;

9) substituted alkenyl as defined in G herein;

10) alkynyl as defined in C herein;

11) substituted alkynyl as defined in H herein;

12) amino;

13) aminoacyl as defined in F11 herein;

14) alkaryl of the formula -alkylene-aryl having 8 carbon atoms in the alkylene moiety and aryl is defined in F21 herein;

E'

15) aryl as defined in F21 herein;

16) aryloxy having the formula -O-aryl wherein aryl is defined in F21 herein;

17) carboxyl;

18) carboxylalkyl having the formula "-C(O)Oalkyl" wherein alkyl is defined in A herein;

19) cyano;

20) halo selected from fluoro, chloro, bromo and iodo;

21) nitro;

22) heteroaryl as defined in F22 herein;

23) thioalkoxy as defined in F19 herein;

24) substituted thioalkoxy as defined in F20 herein; and

25) trihalomethyl wherein halo is selected from fluoro, chloro, bromo and iodo;

K) aryl as defined in F21 herein;

L) heteroaryl as defined in F22 herein; and

M) heterocyclic as defined in F23 herein;

Z' is represented by the formula -CX'X"-, -T-CH_2- or -T-C(O)- where T is selected from the group consisting of oxygen, sulfur, -NR^5 where R^5 is:

N) hydrogen;

O) acyl as defined in F7 herein;

E'

P) alkyl as defined in A herein;

Q) aryl as defined in F21 herein; or

R) heteroaryl as defined in F22 herein;

X' is hydrogen, hydroxy or fluoro; X'' is hydrogen, hydroxy or fluoro, or X' and X'' together form an oxo group;

R^2 is selected from the group consisting of:

S) alkyl as defined in A herein;

T) alkenyl as defined in B herein;

U) alkynyl as defined in C herein;

V) substituted alkyl as defined in F herein;

W) substituted alkenyl as defined in G herein;

X) substituted alkynyl as defined in H herein;

Y) cycloalkyl as defined in D herein;

Z) aryl as defined in F21 herein;

AA) heteroaryl as defined in F22 herein;

BB) heterocyclic as defined in F23 herein;

BB^1) 2-aminopyrid-6-yl;

BB^2) 2-methylcyclopentyl;

BB^3) cyclohex-2-enyl; and

BB^4) -$(CH_2)_4NHC(O)OC(CH_3)_3$

W, together with $-C(H)_pC(=X)-$, forms a:

CC) cycloalkyl as defined in D herein;

DD) cycloalkenyl as defined in E herein;

EE) heterocyclic as defined in F23 herein;

FF) substituted cycloalkyl as defined in I herein; or

GG) substituted cycloalkenyl group as defined in J herein;

wherein each of said cycloalkyl, cycloalkenyl, heterocyclic, substituted cycloalkyl or substituted cycloalkenyl group is ~~optionally~~ fused to form a bi- or multi-fused ring system with one or more ring structures selected from the group consisting of:

HH) cycloalkyl as defined in D herein;

II) cycloalkenyl as defined in E herein;

JJ) heterocyclic as defined in F23 herein;

KK) aryl as defined in F21 herein; and

LL) heteroaryl as defined in F22 herein;

which, in turn, each of such ring structures is optionally substituted with 1 to 4 substituents selected from the group consisting of:

MM) hydroxyl;

NN) halo as defined in F21 herein;

OO) alkoxy as defined in F1 herein;

PP) substituted alkoxy as defined in F2 herein;

QQ) thioalkoxy as defined in F19 herein;

RR) substituted thioalkoxy as defined in F20 herein;

SS) nitro;

TT) cyano;

UU) carboxyl;

VV) carboxyl esters;

WW) alkyl as defined in A herein;

XX) substituted alkyl as defined in F herein;

YY) alkenyl as defined in B herein;

ZZ) substituted alkenyl as defined in G herein;

AAA) alkynyl as defined in C herein;

BBB) substituted alkynyl as defined in H herein;

CCC) amino;

DDD) N-alkyl amino wherein alkyl is defined in A herein;

EEE) N,N-dialkyl amino wherein alkyl is defined in A herein;

FFF) N-substituted alkylamino wherein alkyl is defined in A herein;

GGG) N-alkyl N-substituted alkylamino wherein alkyl is defined in A herein;

HHH) N,N-disubstituted alkyl amino;

III) $-NHC(O)R^4$ where each R^4 is independently selected from the group consisting of:

1) alkyl as defined in A herein;

2) substituted alkyl as defined in F herein;

3) aryl as defined in F21 herein;

JJJ) $-NHSO_2R^4$ wherein R^4 is defined in III herein;

KKK) $-C(O)NH_2$;

LLL) $-C(O)NHR^4$ where R^4 is defined in III herein;

MMM) $-C(O)NR^4R^4$ where R^4 is defined in III herein;

NNN) $-S(O)R^4$ where R^4 is defined in III herein;

OOO) $-S(O)_2R^4$ where R^4 is defined in III herein;

PPP) $-S(O)_2NHR^4$ where R^4 is defined in III herein; and

QQQ) $-S(O)_2NR^4R^4$ where R^4 is defined in III herein;

X is selected from the group consisting of oxo (=O), thiooxo (=S), hydroxyl (-H, -OH), thiol (H, -SH) and hydro (H, H);

p is an integer equal to 0 or 1 such that when *p* is zero, the ring defined by W and $-C(H)_pC(=X)-$ is unsaturated at the carbon atom of ring attachment to NH and when *p* is one, the ring is saturated at the carbon atom of ring attachment to NH;

or pharmaceutically acceptable salts thereof;

with the following provisos:

RRR. when R^1 is 3,5-difluorophenyl, R^2 is $-CH_3$, Z' is $-CH_2-$, and *p* is 1, then W, together with >CH and >C=X, does not form a 2-(S)-indanol group;

E1 SSS. when R^1 is phenyl, R^2 is $-CH_3$, Z' is $-CH_2-$, *p* is 1, then W, together with >CH and >C=X, does not form a trans-2-hydroxy-cyclohex-1-yl group;

TTT. when R^1 is cyclopropyl, R^2 is $-CH_3$, Z' is $-CH_2-$, and *p* is 1, then W, together with >CH and >C=X, does not form an N-methylcaprolactam group;

UUU. when R^1 is 4-chlorobenzoyl-CH_2-, R^2 is $-CH_3$, Z' is $-CH_2-$, and *p* is 1, then W, together with >CH and >C=X, does not form an 2,3-dihydro-1-methyl-5-phenyl-1H-1,4-benzodiazepin-2-one;

VVV. when R^1 is 2-phenylphenyl, R^2 is $-CH_3$, Z' is $-CH_2-$, and *p* is 1, then W, together with >CH and >C=X, does not form an 7-methyl-5,7-dihydro-6H-dibenz[b,d]azepin-6-one;

WWW. when R^1 is $CH_3OC(O)CH_2-$, R^2 is $-CH_3$, Z' is $-CH_2-$, and *p* is 1, then W, together with >CH and >C=X, does not form an 2,3-dihydro-1-(*t*-butylC(O)CH_2-)-5-(2-pyridyl)-1H-1,4-benzodiazepin-2-one;

XXX. when R^1 is 4-ethoxyphenyl, 2,4,6-trimethylphenyl, 4-phenylphenyl, $CH_3OC(O)CH_2-$, 4-$HOCH_2$-phenyl, 2,4,6-trifluorophenyl, 2-trifluoromethyl-4-fluorophenyl, or CH_3S-, R^2 is $-CH_3$, Z' is $-CH_2-$, and *p* is 1, then W, together with >CH and >C=X, does not form a 2,3-dihydro-1-(N,N-diethylamino-CH_2CH_2-)-5-(2-pyridyl)-1H-1,4-benzodiazepin-2-one;

YYY. when R^1 is 2,6-difluorophenyl, R^2 is $-CH_3$, Z' is -CH(OH)-, and *p* is 1, then W, together with >CH and >C=X, does not form a 2,3-dihydro-1-(N,N-diethylamino-CH_2CH_2-)-5-(2-pyridyl)-1H-1,4-benzodiazepin-2-one; and

ZZZ. when the ring defined by W and $-C(H)_pC(=X)-$ forms a cycloalkyl, then it does not form a cycloalkyl of from 3 to 8 carbon atoms optionally substituted with 1 to 3 alkyl groups.

121-130. Canceled.